

Applic. No.: 09/939,330
Amdt. Dated May 31, 2006
Reply to Office action of March 21, 2006

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-9 remain in the application. Claim 1 has been amended. Claims 10-12 have been cancelled.

In the first paragraph on page 3 of the above-mentioned Office action, claims 1-9 have been rejected as being unpatentable over Vaartstra (US 6,159,855) in view of Ahmed (US 4,468,283) under 35 U.S.C. § 103(a).

The rejection has been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found in Figs. 1 and 2 and on page 12, lines 13-24 of the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

providing a distributor plate in the interior space of the reactor chamber by mounting the distributor plate on the left side wall of the reactor wall and on the right side wall of the reactor wall so that the distributor plate horizontally extends from the left side wall to the

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right side wall, and setting a distance between the distributor plate and the substrate surface of less than 2cm.

It is clearly shown in Figs. 1 and 2 of the drawings of the instant application that distributor plate (2 in Fig. 1 and 22 in Fig. 2) is mounted at the side walls of the reactor chamber (1 in Fig. 1 and 21 in Fig. 2). Therefore, the distributor plate has the same lateral size or diameter of the reactor chamber and the gases supplied to the reactor chamber upstream of the distributor plate are distributed by the distributor plate over the entire lateral size or diameter of the reactor chamber.

In contrast to the invention of the instant application, the prior art shows reactor chambers with distributor plates wherein the distributor plate does not have the same lateral size or diameter as the reactor chamber so that the gases supplied to the reactor chamber are not supplied over the entire lateral cross-section of the reactor chamber.

As explained on page 12, lines 13-24 of the specification of the instant application, in a preferred way of implementing the invention of the instant application, the chemical vapor deposition is carried out in such a way that no appreciable back diffusion of the reaction products occurs, with the

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result that molecules by which the growth of the layer is positively influenced are supplied essentially or entirely by the fed-in auxiliary substance. This ensures that the density of the molecules of this type over the substance is spatially constant. This can be achieved by providing a distributor plate which extends from one side wall of the reactor chamber to an opposing other side wall of the reactor chamber so that the reaction gases can flow downwards over the entire lateral cross-section of the reactor chamber between the side walls, and by setting a relatively small distance (less than 2 cm) between the distributor plate and the substrate wafer.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In the first paragraph on page 4 of the above-mentioned Office action, claim 12 has been rejected as being unpatentable over Vaartstra in view of Ahmed and further in view of Wessels et al. (US 5,185,317) under 35 U.S.C. § 103(a).

Claim 12 has been cancelled.

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In view of the foregoing, reconsideration and allowance of claims 1-9 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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May 31, 2006

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